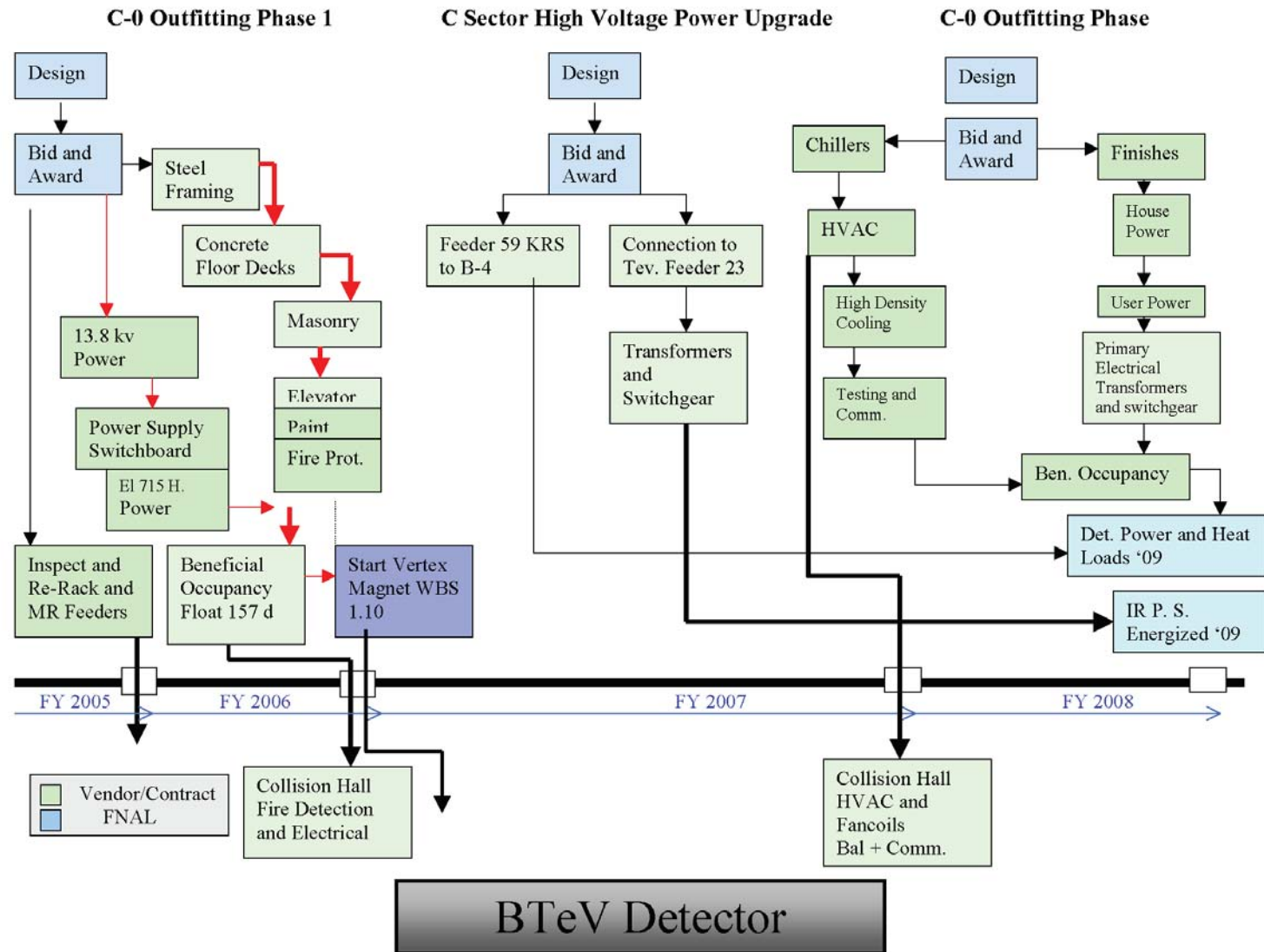


C-0 Outfitting Schedule

Tom Lackowski
Director's Mini-Review
May 27, 2004

- Schedule changes and the changes to the current float are a result of :
 - Using the difference between “Ready By” and “Need By” dates to calculate float.
 - Concentrating the Phase 1 high voltage work (B4 to C0 feeder work) late in the Phase 1 overall schedule. (This places the high voltage costs to FY 06 while still providing the power to test the vertex magnet on time.)
 - Collision Hall work is planned to take full advantage of any early TeVatron shutdowns.
 - Account for additional Conceptual Design to minimize Title 2 engineering duration.



Gantt Chart

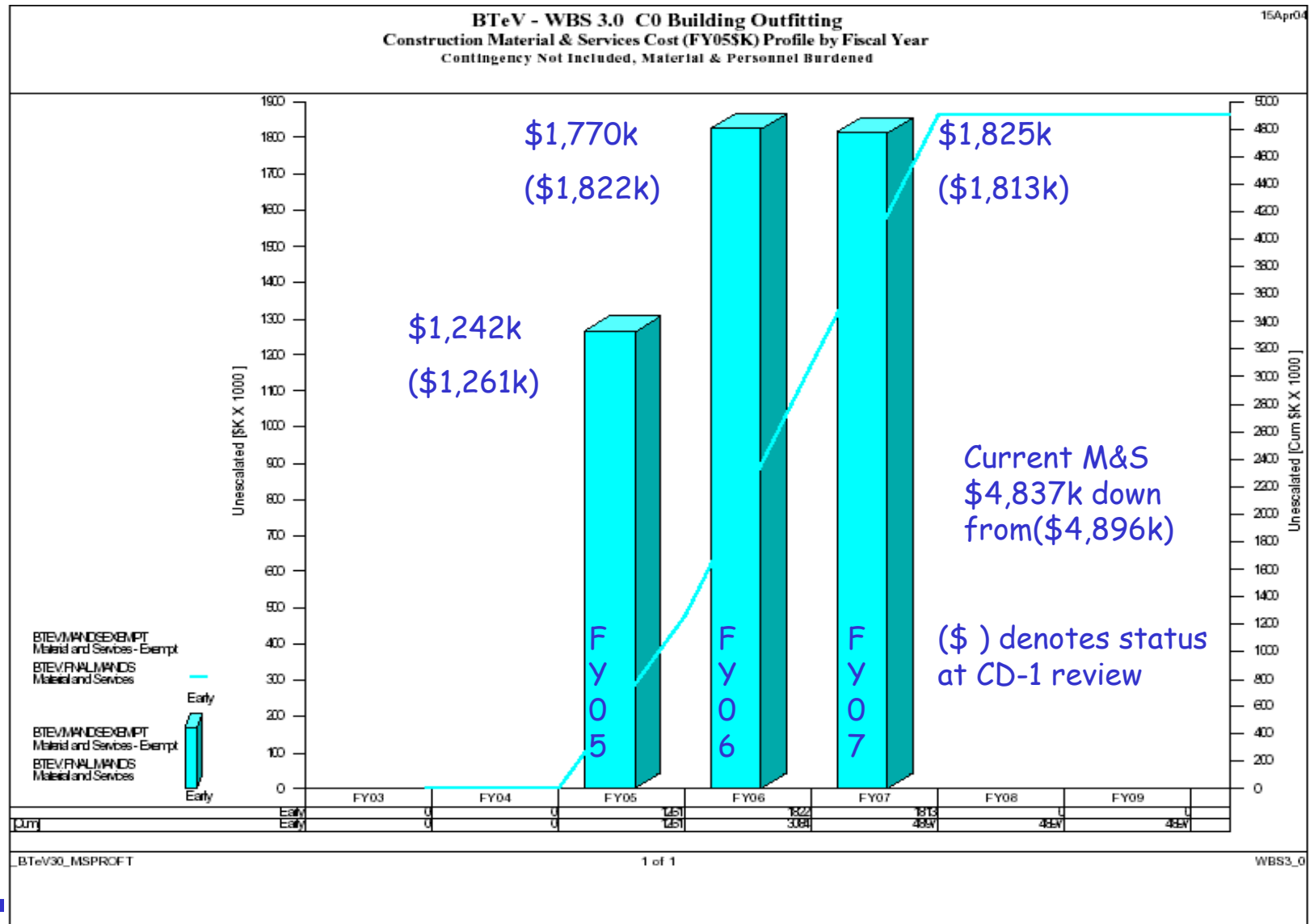
WBS	Activity Desc.	Duration	Early Start	Early Finish	Predecessors	FY05				FY06				F	
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
.1	C-0 Outfitting Phase 1	351d	01Oct04	03Feb06											
.1.1	Design to Award C-0 Phase 1	85d	01Oct04	27Jan05											
.1.3	C-0 Outfitting Phase 1 Construction Contract	266d	28Jan05	03Feb06											
.1.3.4	Structural Steel & Weather Enclosures	111d	14Feb05	18Jul05											
.1.3.4.3	Erect Structural Steel	10d	25Apr05	06May05	1.3.3.10[FS]; 1.3.3										
.1.3.5	Structural Concrete	90d	14Feb05	17Jun05											
.1.3.5.4	FBP Concrete @ EI 764'	15d	30May05	17Jun05	1.3.5.3[FS]										
.1.3.6	Concrete Masonry	147d	14Feb05	06Sep05											
.1.3.6.7	Concrete Masonry EI 766-0	9d	17Aug05	29Aug05	1.3.6.6[FS]										
.1.3.7	Conveying System	153d	14Feb05	14Sep05											
.1.3.8	Finishes	60d	19Jul05	10Oct05											
.1.3.9	Fire Protection	42d	30Aug05	26Oct05											
.1.3.9.10	Trim Out Sprinklers EI 766-0	4d	21Oct05	26Oct05	1.3.9.6[FS]; 1.3.9.1										
.1.3.10	Fire Detection	54d	22Sep05	06Dec05											
.1.3.10.6	Test Fire Detection	3d	02Dec05	06Dec05	1.3.10.5[FS]										
.1.3.12	Feeder From B-4 to C-0	195d	09May05	03Feb06											
.1.3.12.12	Pull Feeder B-4 to C-0 Test Area	3d	18Jan06	20Jan06	1.3.12.11[FS]; 4.4										
.1.3.12.15	Phase 1 Ben. Occ. Ready By	0	21Dec05	21Dec05	1.3.12.14[FS]; 1.3.										
.1.3.12.16	Phase 1 Complete	9d	24Jan06	03Feb06	1.3.12.12[FS]; 1.3.										

WBS 3.0 Total Construction Cost

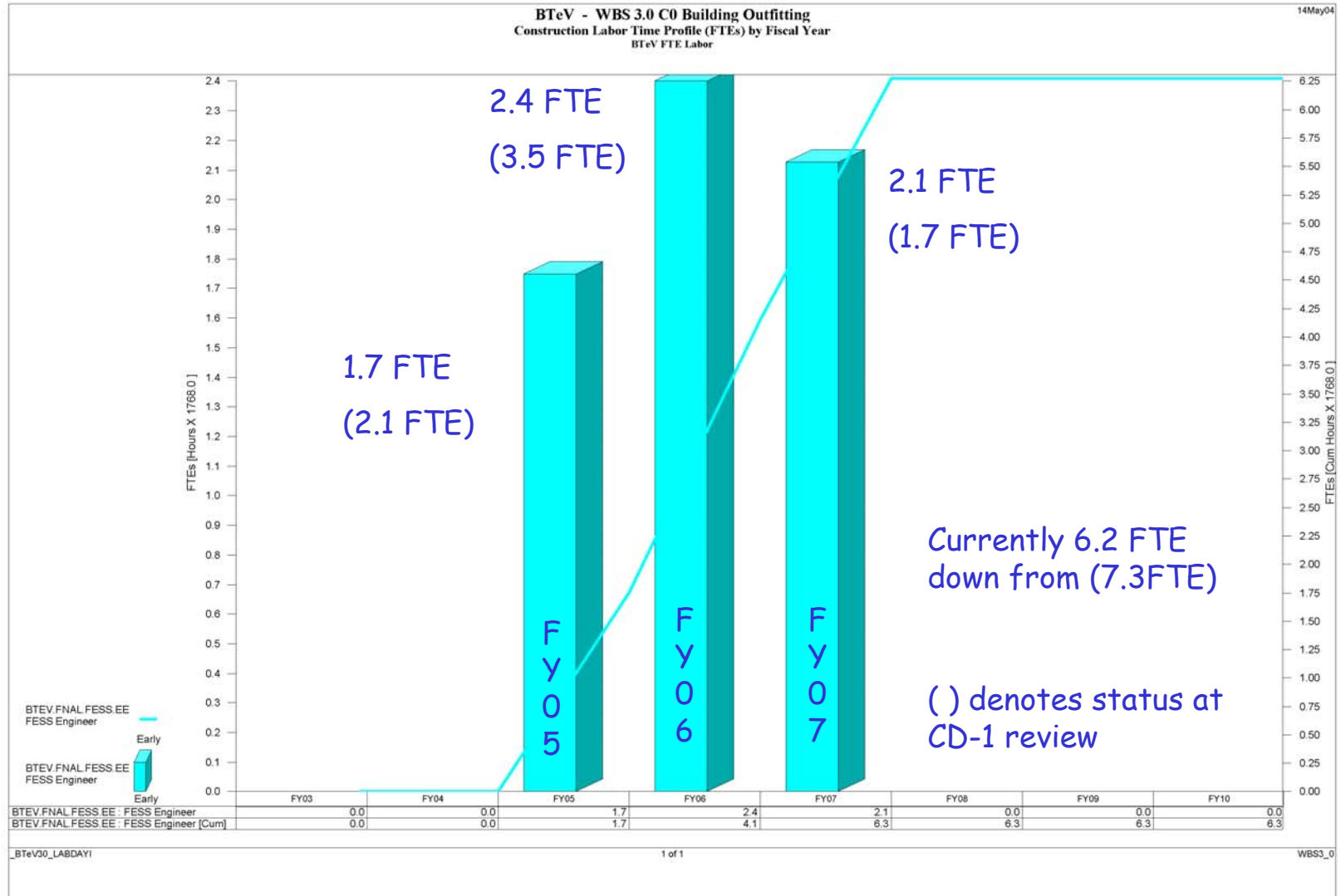
Activity ID	Activity Name	Material (\$)	Labor (\$)	Base Cost(\$)	Material Contingency (%)	Labor Contingency (%)	Total FY05	Total FY06	Total FY07	Total FY08	Total FY09	Total FY05-09
3.1	C-0 Outfitting Phase 1	1,753,094	276,405	2,029,499	20	20	1,588,689	846,710	0	0	0	2,435,399
3.2	C-0 Outfitting Phase 2	1,859,031	444,071	2,303,103	22	20	0	280,303	2,519,673	0	0	2,799,976
3.3	C Sector High Voltage Power Upgrade	599,249	175,471	774,720	20	20	0	843,630	86,034	0	0	929,664
3.4	Pre Procured Items	625,337	38,347	663,685	20	20	174,539	621,883	0	0	0	796,422
3	Subproject 3.0	4,836,712	934,294	5,771,006	21	20	1,763,228	2,592,526	2,605,706	0	0	6,961,460

Costs reduced by \$251K

M&S Profile



Labor Profile



➤ Needed by dates:

- Beneficial Occupancy of the Lower Level & Upper Assembly Areas 28 July 06
- Assembly Service Building Complete 01 May 08

➤ Ready dates:

- Beneficial Occupancy of the Lower & Upper Assembly Areas
21 Dec. 05 157 work days float
- Outfitting Phase 1 Complete – 06 Feb. 06 124 work days float
- C Sector High Voltage - 24 Oct 06 397 work days float
- Assembly Service Building Complete
6 July 07 214 work days float

➤ Beneficial Occupancy of Lower and Upper Assembly Area allows the start of the vertex magnet. Electrical power for magnet testing is available at Phase 1 complete.

- The ready by dates are realistic and achievable.
- The durations and logic used to calculate these dates are based on previous experience at Fermilab.
- There is schedule contingency or float of 157 work days between the “Ready By” date and the “Need By” date for the Beneficial Occupancy of the Lower and Upper Assembly Areas.
- 157 work days of float provides a very high level of confidence for on time completion.

- Recommendations:

- Define and document boundaries and interfaces with both integration and interaction region on time for CD-2 review.
 - The effort to formalize the boundaries between subprojects and define the requirements has been started and will be completed in advance of the CD-2 review. The boundary between subprojects have been established and are reflected in the subproject current estimates.
- Involve key procurement personnel and approving officials in advance to allow for rapid placement of the large Phase I procurement at project approval (CD-2).
 - Several meetings have occurred with members of the Business Services and WBS 3.0 to discuss the BTeV procurement. The procurement department is developing a detailed flow chart for the activities leading to the contract award for C0 Outfitting Phase 1.